PATENT ABSTRACTS OF JAPAN

(11)Publication number:

08-245291

(43) Date of publication of application: 24.09.1996

(51)Int.CI. C30B 25/14 C30B 29/40 H01L 21/205

(21)Application number: 07-051203 (71)Applicant: SUMITOMO ELECTRIC IND LTD

(22)Date of filing: 10.03.1995 (72)Inventor: SHIMAZU MITSURU

(54) METHOD FOR GROWING III-V COMPOUND SEMICONDUCTOR CRYSTAL

(57)Abstract:

PURPOSE: To provide a method for growing a DI-V compd. semiconductor crystal by which the thickness of a layer in which carbon has been doped at a high concn. can be controlled on an atomic layer level and highly uniform growth can be carried out even on a substrate of a large diameter.

CONSTITUTION: When a III-V compd. semiconductor crystal is grown by an organometallic vapor growth method, organometallic stock of a group III metal and organometallic stock of a group V metal are alternately fed and carbon is doped. If necessary, hydride of a group V metal is fed between the feeds of the stocks or added to the latter stock and fed, the amt. of the hydride fed and the feeding time are regulated and the amt. of carbon doped is controlled.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office